

Remarks

Claims 1-15 were rejected as being unpatentable over Wilks, Jr. (US 5,125,742), Ostrander et al. (US 6,368,560), Damen et al. (US 5,886,463), Yokokawa et al. (US 5,785,729), Paitchell (US 4,523,740) and/or the M.S. Rosen et al article. The rejections are now moot in view of the amendments made to the claims. As amended, the claims are submitted as clearly defining patentably over the applied references for at least the following reasons.


As amended, claim 1 recites a sample cell comprising, *inter alia*, a glass body including at least one orifice formed by a tubular portion of the glass body and a plane glass window closing the orifice. The glass window is joined at its outer rim to the interior surface of the tubular portion by a fused joint, and the tubular portion projects outwardly beyond an outer face of the glass window to accommodate an axially outer portion of the fused joint that projects outwardly beyond the outer face of the glass window. This arrangement allows extensive contact between the window and the rim of the orifice (see page 8, para. 6). The projecting part of the tubular portion of the body contributes to hold the glass window against high pressures that can exist in the glass body. As discussed in the specification, the present invention enables the provision of sample cell that can withstand a "high pressure of least 10 bar and temperatures up to 200 degrees Celsius" (see page 7, para. 4).

None of the applied references disclose or suggest a sample cell as set forth in claim 1. For instance, Wilks, Jr. provides no particulars of the manner in which the windows 28 are formed in or assembled in the glass cylinder 22. The other applied references do not overcome this fundamental deficiency of Wilks, Jr. Moreover, Wilks, Jr. relates to a so-called "multi-pass cavity" for multiple reflections of light between the mirroring windows, whereby only a small radiation transmitting window 28 is formed therein. Such a cell is not intended for use with high pressures and high temperatures or lasers with high energy, whereas the present invention enables the fabrication of a sample cell that can be used with high energy lasers with 100 W power in continuous operation (see page 3, para. 4).

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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CERTIFICATE OF MAILING (37 CFR 1.8a)

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Date: February 21, 2006


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